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EXAMINER

TURNER, ASHLEY D

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/681,610 | Applicant(s) BLASZCZAK, MICHAEL A. | |
| | Examiner ASHLEY D. TURNER | Art Unit 2154 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6,8-16,18-23 and 25-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8-16,18-23 and 25-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/8/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 16,17,23,24 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Fitzsimons (US 2004/0205452), in view of Burnett (US 2004/0085999 A1).

As per claim 1, Fitzsimons discloses a method for transforming data comprising: extracting data comprising a plurality of rows wherein each row comprises at least one column from at least one external data source ([0073], Figure 2); storing the data in a buffer [0048]; establishing a first set of pointers to the data [0070]; passing the first set of pointers to the data in the buffer to a first component in order for the first component to apply a first transform to the at least one column in the plurality of rows directly in the buffer [0070]; and loading the data from the buffer to at least one database table [0020]. Fitzsimons did not disclose passing the first set of pointers to the data in the buffer to a second component in order for the second to apply a second transform to the at least one column in the plurality of rows directly in the buffer. The general concept of passing the first set of pointers to the data in the buffer to a second component in order for the second to apply a second transform to the at least one column in the plurality of rows directly in the buffer is well known in the art as taught by Burnett. Burnett discloses passing the first set of pointers to

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the data in the buffer to a second component in order for the second to apply a second transform to the at least one column in the plurality of rows directly in the buffer (Paragraph [0047] With specific reference to FIG. 9 of the drawings, there is shown a flow chart of the buffer write process 650 performed by the buffer manager 403. The protocol engine 402 initiates the write process for each byte destined for storage in the SDRAM 335 or 337. The protocol engine 402 passes an 8-bit data byte, a 13-bit CAM index 613, and a 2-bit command flag 902. The CAM index 613 that is passed to the buffer manager 403 includes an extra bit. That extra bit is a pure cell indication and if it is true, the buffer manager 403 processes the byte passed to the buffer manager 403 in the same way as other bytes stored to the SDRAM, but it is stored in a message block in the SDRAM dedicated to the pure cell special case. The buffer manager 403 maintains the message table in the SDRAM 335 or 337. The message table maps CAM indexes 613 to an address pointer that indicates the location in SDRAM memory that is to receive the next byte. The CAM index having the pure cell bit set to an affirmative value has a dedicated message block in SDRAM 335 or 337. When the buffer write process is initiated, the first step is to evaluate 903 the command flag 902. The command flag 902 indicates one of three possible states; start, continue and end. If the command flag 902 reflects a "start" value 904, the buffer manager 403 creates 905 a new entry in the message table by identifying an unused message block and writing the CAM index 613 to the message table with the appropriate address pointer. If the command flag reflects a "continue" or "end" value 906, it means that reassembly of the current message is in progress and the CAM index 613 is already part of the message table. Accordingly, after creation of the new message table entry 907 or when the command flag reflects a value other than "start", the buffer manager 403 proceeds to look up 908 the CAM

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index 613 in the message table. The look up process returns the address pointer 909 and the buffer manager 403 stores 910 the data byte 901 at the SDRAM location designated by the address pointer 909. The process then increments 911 the address pointer 909 and updates the message table with the new address pointer value. The buffer manager 403 then evaluates 912 the command flag 902. If the command flag reflects an "end" value 913, then the data byte is the last byte for the current message. Accordingly, the buffer manager 403 stores 914 a start address pointer for the current message into a completed message list in the SDRAM 335 or 337 as well as the number of bytes stored in the message. After updating the completed message list or if the command flag 902 does not reflect an "end" value, the process then proceeds to an end. The buffer write process 650 executes for each byte stored in the SDRAM 335 or 337. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fitzsimons to include passing the first set of pointers to the data in the buffer to a second component in order for the second to apply a second transform to the at least one column in the plurality of rows directly in the buffer in order to reduce the occurrence of rivers in the text of the printed document.

As per claim 3, Fitzsimons and Burnett discloses all the limitations of claim 3 which is described above. Fitzsimons also discloses wherein a memory location corresponding to a start of a specific row is determined as a function of a row reference number and a row width indicative of a memory offset corresponding to said start of specific row [0050].

As per claim 16, Fitzsimons discloses a computer-readable medium bearing computer-

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readable instructions for: extracting data comprising a plurality of rows wherein each row comprises at least one column from at least one external data source ([0073], Figure 2); storing the data in a buffer [0048]; establishing a first set of pointers to the data [0070]; [0070], [0076]; and loading the data from the buffer to at least one external data destination [0020]. Fitzsimons did not disclose passing the first set of pointers to the data in the buffer to a first component in order for the first component to apply a first transform to the at least one column in the plurality of rows directly in the buffer. The general concept of passing the first set of pointers to the data in the buffer to a first component in order for the first component to apply a first transform to the at least one column in the plurality of rows directly in the buffer is well known in the art as taught by Burnett. Burnett discloses passing the first set of pointers to the data in the buffer to a first component in order for the first component to apply a first transform to the at least one column in the plurality of rows directly in the buffer (Paragraph [0047] With specific reference to FIG. 9 of the drawings, there is shown a flow chart of the buffer write process 650 performed by the buffer manager 403. The protocol engine 402 initiates the write process for each byte destined for storage in the SDRAM 335 or 337. The protocol engine 402 passes an 8-bit data byte, a 13-bit CAM index 613, and a 2-bit command flag 902. The CAM index 613 that is passed to the buffer manager 403 includes an extra bit. That extra bit is a pure cell indication and if it is true, the buffer manager 403 processes the byte passed to the buffer manager 403 in the same way as other bytes stored to the SDRAM, but it is stored in a message block in the SDRAM dedicated to the pure cell special case. The buffer manager 403 maintains the message table in the SDRAM 335 or 337. The message table maps CAM indexes 613 to an address pointer that indicates the location in SDRAM memory that is to receive the

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next byte. The CAM index having the pure cell bit set to an affirmative value has a dedicated message block in SDRAM 335 or 337. When the buffer write process is initiated, the first step is to evaluate 903 the command flag 902. The command flag 902 indicates one of three possible states; start, continue and end. If the command flag 902 reflects a "start" value 904, the buffer manager 403 creates 905 a new entry in the message table by identifying an unused message block and writing the CAM index 613 to the message table with the appropriate address pointer. If the command flag reflects a "continue" or "end" value 906, it means that reassembly of the current message is in progress and the CAM index 613 is already part of the message table. Accordingly, after creation of the new message table entry 907 or when the command flag reflects a value other than "start", the buffer manager 403 proceeds to look up 908 the CAM index 613 in the message table. The look up process returns the address pointer 909 and the buffer manager 403 stores 910 the data byte 901 at the SDRAM location designated by the address pointer 909. The process then increments 911 the address pointer 909 and updates the message table with the new address pointer value. The buffer manager 403 then evaluates 912 the command flag 902. If the command flag reflects an "end" value 913, then the data byte is the last byte for the current message. Accordingly, the buffer manager 403 stores 914 a start address pointer for the current message into a completed message list in the SDRAM 335 or 337 as well as the number of bytes stored in the message. After updating the completed message list or if the command flag 902 does not reflect an "end" value, the process then proceeds to an end. The buffer write process 650 executes for each byte stored in the SDRAM 335 or 337. It would have been obvious to one of ordinary skill in the art at the of the invention to modify Fitzsimons to include passing the first set of pointers to the data in the buffer to a second component in order

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for the second to apply a second transform to the at least one column in the plurality of rows directly in the buffer in order to reduce the occurrence of rivers in the text of the printed document.

As per claim 23, Fitzsimons and Burnett disclose all the limitations of claim 23 which are described above. Fitzsimons also discloses a system comprising a processor, memory, and instructions for (claim 16): extracting data from at least one external data source ([0073], Figure 2); storing the data in a buffer [0048]; establishing a first set of pointers to the data; passing the first set of pointers to the data in the buffer to a first component in order for the first component to transform the data directly in the buffer [0070]; and loading the data from the buffer to at least one external data destination [0020].

Claims 4-9, 18,19,20,21,22 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Fitzsimons (US 2004/0205452), in view of (US 2004/0085999 A1) further in view of Carosso et al (US 4,783,760).

As per claim 4, Fitzsimons and Burnett disclose all the limitations of claim 4 which is described above. Fitzsimons also discloses wherein a memory location corresponding to a start of a specific column in a specific row is determined as a function of a row reference number [0076].

Fitzsimons did not disclose a row width plus a column offset indicative of a memory offset corresponding to said start of said specific column in said specific row. The general concept

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having a row width plus a column offset indicative of a memory offset corresponding to said start of said specific column in said specific row is well known in the art as taught by Carosso. Carosso discloses a row width plus a column offset indicative of a memory offset corresponding to said start of said specific column in said specific row (Col. 30 lines 21-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fitzsimons to include a row width plus a column offset indicative of a memory offset corresponding to said start of said specific column in said specific row in order to reduce the occurrence of rivers in the text of the printed document.

As per claim 5, Fitzsimons and Burnett disclose all the limitations of claim 5 which is described above. Fitzsimons did not disclose wherein the first set of pointers point to the beginning of the rows. The general concept of having the first set of pointers point to the beginning of the rows is well known in the art as taught by Carosso. Carosso discloses the first set of pointers point to the beginning of the rows (Col 23 lines 21-24). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fitzsimons to include the first set of pointers point to the beginning of the rows in order to reduce the occurrence of rivers in the text of the printed document.

As per claim 6, Fitzsimons and Burnett discloses all the limitations of claim 6 which is described above. Fitzsimons did not discloses wherein the step of establishing first set of pointers that point to the beginning of the rows comprising the sub-step of determining the beginning of arrow as a function of the row number and the row width. The general concept of establishing first set of

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pointers that point to the beginning of the rows comprising the sub-step of determining the beginning of arrow as a function of the row number and the row width is well known in the art as taught by Carosso. Carosso discloses establishing first set of pointers that point to the beginning of the rows comprising the sub-step of determining the beginning of arrow as a function of the row number and the row width (Col. 30 lines 11-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fitzsimons to include establishing first set of pointers that point to the beginning of the rows comprising the sub-step of determining the beginning of arrow as a function of the row number and the row width in order to reduce the occurrence of rivers in the text of the printed document.

As per claim 8, Fitzsimons, Burnett, and Carosso disclose all the limitations of claim 8 which is described above. Fitzsimons also discloses after the element of storing the data in a buffer and establishing a first set of pointers to the data, establishing a second set of pointers to the data and establishing a third set of pointers to the data [0070], [0090], [0092].

As per claim 9, Fitzsimons and Burnett, Carosso disclose all the limitations of claim 9; which is described above. Fitzsimons also discloses wherein said method further comprises, after the element of passing the first set of pointers to the first component [0070], [0090], [0092].

As per claim 10, Fitzsimons disclose comprising: the first component receiving the first set of pointers, the second set of pointers, and the third set of pointers [0070], [0090], [0092]; the first

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component traversing each row via the first set of pointers [0070]; for each row, first component designating each row as either a first path row or a second path row. Fitzsimons did not disclose based on a criteria for splitting said data; for each first path row, assigning a pointer from the second set of pointers to point at each such first row; for each second path row, assigning a pointer from the third set of pointers to point at each such second path row; and returning the second set of pointers and the third set of pointers. The general concept of a criteria for splitting said data; for each first path row, assigning a pointer from the second set of pointers to point at each such first row; for each second path row, assigning a pointer from the third set of pointers to point at each such second path row; and returning the second set of pointers and the third set of pointers is well known in the art as taught by Carosso. Carosso discloses a criteria for splitting said data; for each first path row, assigning a pointer from the second set of pointers to point at each such first row; for each second path row, assigning a pointer from the third set of pointers to point at each such second path row; and returning the second set of pointers and the third set of pointers (Col. 30 Fig.9). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fitzsimons to include a criteria for splitting said data; for each first path row, assigning a pointer from the second set of pointers to point at each such first row; for each second path row, assigning a pointer from the third set of pointers to point at each such second path row; and returning the second set of pointers and the third set of pointers in order for the subsequent component to transform the data directly in the buffer in order to reduce the occurrence of rivers in the text of the printed document.

As per claim 18, Fitzsimons and Carosso disclose all the limitations of claim 18 which are

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described above. Fitzsimons did not disclose comprising computer-readable instructions wherein the first set of pointers point to the beginning of the rows. The general concept of having a computer-readable instructions wherein the first set of pointers point to the beginning of the rows is well known in the art as taught by Carosso. Carosso discloses computer-readable instructions wherein the first set of pointers point to the beginning of the rows (Col 23 lines 21-24). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fitzsimons to include the first set of pointers point to the beginning of the rows in order to reduce the occurrence of rivers in the text of the printed document].

As per claim 19, Fitzsimons and Carosso disclose all the limitations of claim 19 which are described above. Fitzsimons did not discloses comprising computer-readable instructions for, after the element of passing the first set of pointers to the data in the buffer to a first component in order for the first component to transform the data directly in the buffer, passing the first set of pointers to the data in the buffer to a subsequent component in order for the subsequent component to transform the data directly in the buffer. The general concept of comprising computer-readable instructions for, after the element of passing the first set of pointers to the data in the buffer to a first component in order for the first component to transform the data directly in the buffer, passing the first set of pointers to the data in the buffer to a subsequent component in order for the subsequent component to transform the data directly in the buffer is well known in the art as taught by Carosso. Carosso discloses comprising computer-readable instructions for, after the element of passing the first set of pointers to the data in the buffer to a first component in order for the first component to transform the data directly in the buffer,

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passing the first set of pointers to the data in the buffer to a subsequent component in order for the subsequent component to transform the data directly in the buffer (Col.18 lines 66-68 and Col. 19 lines 1-20). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fitzsimons to include computer-readable instructions for, after the element of passing the first set of pointers to the data in the buffer to a first component in order for the first component to transform the data directly in the buffer, passing the first set of pointers to the data in the buffer to a subsequent component in order for the subsequent component to transform the data directly in the buffer to subsequent component in order for the subsequent component to transform the data directly in the buffer in order to reduce the occurrence of rivers in the text of the printed document.

As per claim 20, Fitzsimons and Carosso disclose all the limitations of claim 20 which are described above. Fitzsimons also discloses comprising computer-readable instructions for, after the element of storing the data in a buffer and establishing a first set of pointers to the data, establishing a second set of pointers to the data and establishing a third set of pointers to the data [0070][0090][0092].

As per claim 21, Fitzsimons and Carosso disclose all the limitations of claim 21 which are described above. Fitzsimons also discloses after the element of passing the first set of pointers to the first component, passing the second set of pointers and the third set of pointers to the first component [0070], [0090], [0092].

As per claim 22, Fitzsimons and Carosso discloses all the limitations of claim 22 which are described above. Fitzsimons also discloses comprising computer-readable instructions comprising: the first component receiving the first set of pointers, the second set of pointers, and the third set of pointers; the first component traversing each row via the first set of pointers; for each row [0070], [0076], the first component designating each row as either a first path row or a second path row. Fitzsimons did not discloses based on a criteria for splitting said data; for each first path row, assigning a pointer from the second set of pointers to point at each such first path row; for each second path row, assigning a pointer from the third set of pointers to point at each such second path row; and returning the second set of pointers and the third set of pointers. The general concept of based on a criteria for splitting said data; for each first path row, assigning a pointer from the second set of pointers to point at each such first path row; for each second path row, assigning a pointer from the third set of pointers to point at each such second path row; and returning the second set of pointers and the third set of pointers is well known in the art as taught by Carosso. Carosso disclose based on a criteria for splitting said data; for each first path row, assigning a pointer from the second set of pointers to point at each such first path row; for each second path row, assigning a pointer from the third set of pointers to point at each such second path row; and returning the second set of pointers and the third set of pointers (Col. 30 Fig.9). It would have been obvious to one of ordinary skill in art at the time of the invention to include a criteria for splitting said data; for each first path row, assigning a pointer from the second set of pointers to point at each such first path row; for each second path row, assigning a pointer from the third set of pointers to point at each such second path row; and returning the second set of

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pointers and the third set of pointers in order for the subsequent component to transform the data directly in the buffer in order to reduce the occurrence of rivers in the text of the printed document.

Claims 11-15, 25-29 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Fitzsimons (US 2004/0205452), in view of Carosso et al (US 4,783,760).

As per claim 11, Fitzsimons disclose a method for transforming data comprising: extracting data from a source ([0073], Figure 2), said data comprising a plurality of row [0076]; writing the data to a buffer [0050]; passing the plurality of pointers to a plurality of subsequent transformation object in a path, wherein each transformation object applies a transformation to the data in series [0103] [0104]; directly accessing the data in the buffer via the pointers[0070 passing the plurality of pointers to a subsequent one of the transformation objects when there remains objects transformations unexecuted in the path[0103]; reading the data from buffer; and loading the data to a destination[0020]. Fitzsimons did not disclose creating a plurality of pointers wherein each pointer uniquely points to a single row of data from among the plurality of rows of data in the buffer. The general concept of creating a plurality of pointers wherein each pointer uniquely points to a single row of data from among the plurality of rows of data in the buffer is well known in the art as taught by Carosso. Carosso discloses creating a plurality of pointers wherein each pointer uniquely points to a single row of data from among the plurality of rows of data in

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the buffer (Col. 30 lines 7 –25) and (Col. 23 lines 21-24). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fitzsimons to include creating a plurality of pointers wherein each pointer uniquely points to a single row of data from among the plurality of rows of data in the buffer in order for the subsequent component to transform the data directly in the buffer in order to reduce the occurrence of rivers in the text of the printed document.

As per claim 12, Fitzsimons and Carosso disclose all the limitations of claim 12, which is described above. Fitzsimons also discloses wherein the act of enabling the transformation object to transform the data in the buffer comprises the modification of a value in a data cell [0076].

As per claim 13, Fitzsimons and Carosso disclose all the limitations of claim 13, which is described above. Fitzsimons also discloses wherein the act of enabling the transformation object to transform the data in the buffer comprises the swapping of at least two pointers [0070].

As per claim 15, Fitzsimons and Carosso disclose all the limitations of claim 15 which is described above. Fitzsimons also disclosed wherein the transformation object transforms the data by initializing at least two more arrays to point to select elements of data [0095].

As per claim 25, Fitzsimons and Carosso disclose all the limitations of claim 25 which is described above. Fitzsimons did not disclose comprising computer-readable instructions wherein the first set of pointers point to the beginning of the rows. The general concept of having the

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first set of pointers point to the beginning of the rows is well known in the art as taught by Carosso. Carosso discloses the first set of pointers point to the beginning of the rows (Col 23 lines 21-24). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fitzsimons to include the first set of pointers point to the beginning of the rows in order to reduce the occurrence of rivers in the text of the printed document.

As per claim 26, Fitzsimons and Carosso disclose all the limitations of claim 26 which are described above. Fitzsimons did not disclose comprising computer-readable instructions for, after the element of passing the first set of pointers to the data in the buffer to a first component in order for the first component to transform the data directly in the buffer, passing the first set of pointers to the data in the buffer to a subsequent component in order for the subsequent component to transform the data directly in the buffer. The general concept of comprising computer-readable instructions for, after the element of passing the first set of pointers to the data in the buffer to a first component in order for the first component to transform the data directly in the buffer, passing the first set of pointers to the data in the buffer to a subsequent component in order for the subsequent component to transform the data directly in the buffer is well known in the art as taught by Carosso. Carosso discloses comprising computer-readable instructions for, after the element of passing the first set of pointers to the data in the buffer to a first component in order for the first component to transform the data directly in the buffer, passing the first set of pointers to the data in the buffer to a subsequent component in order for the subsequent component to transform the data directly in the buffer (Col.18 lines 66-68 and Col. 19 lines 1-20). It would have been obvious to one of ordinary skill in the art at the time of

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the invention to modify Fitzsimons to include computer-readable instructions for, after the element of passing the first set of pointers to the data in the buffer to a first component in order for the first component to transform the data directly in the buffer, passing the first set of pointers to the data in the buffer to a subsequent component in order for the subsequent component to transform the data directly in the buffer to subsequent component in order for the subsequent component to transform the data directly in the buffer in order to reduce the occurrence of rivers in the text of the printed document.

As per claim 27, Fitzsimons and Carosso disclose all the limitations of claim 27 which are described above. Fitzsimons also discloses comprising computer-readable instructions for, after the element of storing the data in a buffer and establishing a first set of pointers to the data, establishing a second set of pointers to the data and establishing a third set of pointers to the data [0070][0090][0092].

As per claim 28, Fitzsimons and Carosso disclose all the limitations of claim 28 which are described above. Fitzsimons also discloses after the element of passing the first set of pointers to the first component, passing the second set of pointers and the third set of pointers to the first component [0070], [0090], [0092].

As per claim 29, Fitzsimons and Carosso disclose all the limitations of claim 29 which are described above. Fitzsimons also discloses comprising computer-readable instructions comprising: the first component receiving the first set of pointers, the second set of pointers, and

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the third set of pointers; the first component traversing each row via the first set of pointers; for each row [0070], [0076], the first component designating each row as either a first path row or a second path row. Fitzsimons did not disclose based on a criteria for splitting said data; for each first path row, assigning a pointer from the second set of pointers to point at each such first path row; for each second path row, assigning a pointer from the third set of pointers to point at each such second path row; and returning the second set of pointers and the third set of pointers. The general concept of based on a criteria for splitting said data; for each first path row, assigning a pointer from the second set of pointers to point at each such first path row; for each second path row, assigning a pointer from the third set of pointers to point at each such second path row; and returning the second set of pointers and the third set of pointers is well known in the art as taught by Carosso. Carosso disclose based on a criteria for splitting said data; for each first path row, assigning a pointer from the second set of pointers to point at each such first path row; for each second path row, assigning a pointer from the third set of pointers to point at each such second path row; and returning the second set of pointers and the third set of pointers (Col. 30 Fig.9). It would have been obvious to one of ordinary skill in art at the time of the invention to include a criteria for splitting said data; for each first path row, assigning a pointer from the second set of pointers to point at each such first path row; for each second path row, assigning a pointer from the third set of pointers to point at each such second path row; and returning the second set of pointers and the third set of pointers in order for the subsequent component to transform the data directly in the buffer in order to reduce the occurrence of rivers in the text of the printed document.

Claim 14 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Fitzsimons (US 2004/0205452), in view of Carosso et al (US 4,783,760) further in view of Gerard (US 6,023,704).

As per claim 14, Fitzsimons and Carosso disclose all the limitations of claim 14 which is described above. Fitzsimons did not disclose wherein the transformation object transforms the data by sorting the data via swapping at least two pointers. The general concept of the transformation object transforms the data by sorting the data via swapping at least two pointers is well known in the art as taught by Gerard. Gerard discloses the transformation object transforms the data by sorting the data via swapping at least two pointers (Col. 8 lines 14-26). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Fitzsimons to include the transformation object transforms the data by sorting the data via swapping at least two pointers in order to provide a less expensive method of copying each item from one place to other.

Conclusion

Arguments are deemed moot in view of the new grounds of rejection necessitated by the amendment.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ashley D. Turner whose telephone number is 571-270-1603. The examiner can normally be reached on Monday thru Friday 7:30a.m.- 5:00p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571-272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Ashley D Turner
Examiner
Art Unit 2154

/Nathan J. Flynn/

Supervisory Patent Examiner, Art Unit 2154